What is claimed:

1. A steering column and seat belts of vehicle, in which
- a runner **(30)** is subdivided into n- crumpling zones;
- a transverse girder **(31)**, side rail **(34)**, mounting girder **(56.1)**, sliding wall **(55)**, passenger compartment **(56)** and stiff crumpling zones Z_a, Z_b, Z_c, Z_d, Z_{n-2}, Z_{n-1}, Z_n, Z_{n+1} are less or hardly deformed under load of front impact energy, hence, suitable for vehicle girders and
- the pivots **(40, 42 to 49)** are arranged to its vehicle girders, a pivot **(41)** to its steering column **(91)**;

equipped with a safety device to increase the reliability and passenger protection in the event of real arbitrary front collision and to assume the passenger protection in the event of failure of airbags and sensors, wherein the safety device comprises

a) at least one pair of independently operating impact elements **(5, 5a to 5d, 5c1, 5e1 to 5e4)** whereas:

a1) their bearing boxes **(30.7, 30.7a)** arranged to or in the vehicle girders, the impact pans **(5.1, 5.1a)** to their first termini and the guide elements **(52)** to their other termini;

a2) their first termini arranged to or in the front portions of runners **(30)**, their other termini through bearings **(58a to 58d)** and the guide elements **(52a)** to their middle portions; and/or

a3) their first termini arranged to or in the front portions of runners **(30)**, their middle portions through bearings **(58a to 58d)** and the guide elements **(52a)** to their other termini; and

b) said bearings **(58a to 58d)** arranged to or in said respective vehicle girders;

c) pivots **(47, 47a)** arranged to said guide elements **(52, 52a)**; and

d) both ends of a wire **(60)**, which is pivotally moved by the pivots **(47 to 49)**, arranged to a pair of front seat belts **(64)** or to all seat belts **(64)**;

so that the independently operating impact elements independently move to tension (pull) the wire **(60)** in any front collision, thus pre-tensioning said seat belts within short time.

2. A steering column and seat belts equipped with energy-absorbing safety device according to claim 1, wherein

a) the safety device is provided with at least one pair of energy-absorbing limitation-units **(70, 80, 80a to 80e)** with sites of predetermined fracture "b"

b) which are arranged to the pair of the front seat belts **(64)** or to all seat belts **(64)** and both ends of the wire **(60)**;

so that due to the independent displacement of impact elements in any front collision the wire **(60)** pulls said limitation-units until fracture of said sites of predetermined fracture takes place, thereby limiting the pre-tensioning force of the seat belts **(64)**, lowering the belt-acceleration by performing work of friction and/or of deflection and preserving the pre-tensioning force by engagement of the parts of retaining parts with each other and/or clamping force.

3. A steering column and seat belts according to at least one of preceding claims, wherein the safety device is provided with

a) at least one pair of delimiters **(51, 51a)** with sites of predetermined fracture "b" arranged to the guide elements **(52)** and/or between the parts of a wire **(61)** and a wire **(62)**; and

b) two wires **(61, 62)** pivotally moved by the pivots **(40, 42 to 46)** whereas their first ends are arranged to the pivot **(41)** of the steering column **(91)** and their other ends to the guide elements **(52a)**, delimiters **(51)** or impact elements **(5a)**,

so that due to the independent displacement of impact elements in any front collision at least one wire **(61, 62)** pulls the steering wheel **(90)** forward out of the head-injury area of the driver until fracture of said sites of predetermined fracture takes place.

4. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of offset of l_x between the terminus of the impact element **(5)** and the front portion of the runner **(30)**.

5. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of

- the bearing **(58a, 58c, 58c1, 58d)** to or in the transverse girder **(31)**, stiff rear portion of the runner **(30)** or sliding wall **(55)**; or
- at least one hole in the transverse girder **(31)** serving as bearing **(58b)**.

6. A steering column and seat belts according to claim 5, wherein a recess of the transverse girder **(31)** is reinforced by the stiff bearing **(58c1)**.

7. A steering column and seat belts according to at least one of claims 5 to 6, wherein the bearing **(58a, 58b, 58c, 58c1, 58d)** is provided with a rubber bush **(58.1)**.

8. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of one of the stiff additional elements **(3a, 3b, 3c, 3d)** to the crumpling zone Z_a, Z_b, Z_c, Z_d of the front portion of the runner **(30)**.

9. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of

- the first terminus of the impact element **(5a)** in the crumpling zone Z_a,
- the middle portion through the bearing **(58a)** of the transverse girder **(31)** and
- the guide element **(52a)** to the other terminus.

10. A steering column and seat belts according to at least one of claims 1 to 8, characterized by arrangement of

- the first terminus of the impact element **(5b to 5d, 5c1, 5e3, 5e4)** to the crumpling zone Z_b, Z_c, Z_d,
- the middle portion through the bearing **(58b, 58c1, 58d)** of the transverse girder **(31)** or bearing **(58c)** of the sliding wall **(55)** and
- the guide element **(52a)** to the other terminus.

11. A steering column and seat belts according to at least one of claims 1 to 8, characterized by arrangement of
- the first terminus of the impact element **(5e1, 5e2)** to the crumpling zone Z_c,
- the guide element **(52a)** to the middle portion and
- the other terminus through the bearing **(58c1)** of the transverse girder **(31)** or bearing **(58c)** of the sliding wall **(55)**.

12. A steering column and seat belts according to at least one of preceding claims, wherein the first terminus of the impact element **(5a to 5d, 5c1, 5e1 to 5e4)** is form- and/or force-locking connected to crumpling zone Z_a, Z_b, Z_c, Z_d.

13. A steering column and seat belts according to claim 12, wherein the first terminus of the impact element is pivotally attached to crumpling zone Z_a, Z_b, Z_c, Z_d by bolt **(54)** and nut **(54.2)** by use of a rubber sleeve **(54.1)**

14. A steering column and seat belts according to at least one of preceding claims, wherein the impact element **(5a, 5b, 5d)** is provided with adjusting holes K_1, K_2,. ., K_h,. ., K_n and/or H_1, H_2, .. , H_n.

15. A steering column and seat belts according to at least one of preceding claims, wherein the guide element **(52, 52a)** is provided with a hole to receive the impact element **(5, 5a to 5d, 5c1, 5e1 to 5e4)** or delimiter **(51)**.

16. A steering column and seat belts according to at least one of preceding claims, wherein the delimiter **(51. 51a)** is provided with site of predetermined fracture "b", adjusting holes L_1, L_2, .. , L_n and/or N_1, N_2, .. , N_n.

17. A steering column and seat belts according to claim 16, wherein the blocking pin **(51.4)** is projected through an adjusting hole of the delimiter **(51)** and secured thereto by securing parts **(51.3)** whereafter the holder **(51.5)** of the delimiter is fastened to nuts **(51.6)** of the transverse girder **(31)** by bolts **(51.7)**.

18. A steering column and seat belts according to at least one of claims 15 to 17, wherein the impact element or delimiter is bolted to the guide element by connection elements **(1.5, 51.1 or 52.1)**.

19. A steering column and seat belts according to claim 16, characterized by arrangement of the delimiter **(51a)** between the parts of the wire **(61, 62)**.

20. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of a wire holder **(61).1, 62.1, 61.1a, 62.1a)** of the end of the wire **(61, 62)** to an adjusting hole of the delimiter **(51)**, adjusting hole K_h of the impact element **(5a, 5b, 5d)** or to the guide element **(52a)**.

21. A steering column and seat belts according to claim 20, wherein the wire holder is pivotally attached to the delimiter, impact element or guide element by connection elements **(51.2, 52.1 or 52.1a)**.

22. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of a clampable spacer **(51.6a)** with open profile and length f_1, f_2, .. , f_m, or f_n to the wire **(61, 62)** between the blocking ring **(51.4a)** and holder **(51.5a)**.

23. A steering column and seat belts according to at least one of preceding claims, wherein the limitation-unit **(70)** consists of a spring element **(72)**, shock absorber **(73)** and delimiter **(71)**.

24. A steering column and seat belts according to claim 23, characterized by arrangement of a retaining notch to a tube **(71.1)** and a retaining plate **(71.3)** pre-loaded by spring element **(71.5)** between both plates **(71.4)** of a retaining element **(71.2)**.

25. A steering column and seat belts according to at least one of claims 1 to 22, wherein the limitation-unit **(80, 80a to 80e)** consists of a retaining element **(81, 81a to 81e)** and at least one clamping element **(82, 82a to 82e)**, whereon a longitudinal gap is defined.

26. A steering column and seat belts according to claim 24 or 25, characterized by arrangement of a retaining element **(71.2, 81, 81a to 81e)** to or in the vehicle girder.

27. A steering column and seat belts according to claim 26, wherein the contact area of the portion **(81.3, 81.3a to 81.3e)** of the retaining element **(81, 81a to 81e)** is surrounded by a sound-proof material **(83)**.

28. A steering column and seat belts according to at least one of claims 23 to 27, wherein the tube **(71.1)** or clamping element **(82, 82a, 82b)** is provided with site of predetermined fracture "b" and/or adjusting holes M_1, M_2, .. ,M_n.

29. A steering column and seat belts according to claim 25, wherein the delimiter **(51c, 51d, 51e)** of the limitation-unit **(80c, 80d, 80e)** is provided with site of predetermined fracture "b" and/or adjusting holes N_1, N_2,. , N_n.

30. A steering column and seat belts according to at least one of claims 25 to 29, wherein both portions of the clamping element **(82a to 82e)** and of the retaining element **(81.3a to 81.3e)** are defined by the same conical form.

31. A steering column and seat belts according to at least one of claims 25 to 30, characterized by arrangement of a gap

- S_A having a retaining hole on the clamping element **(82a)** in longitudinal direction; or
- S_B on the clamping element **(82b)** in longitudinal direction and of a retaining collar **(82.1b)** to the end of said clamping element.

32. A steering column and seat belts according to at least one of claims 25 to 31, characterized by arrangement of a two-sided retaining strut **(81.2a)** to a strut **(81.1a)** of the retaining element **(81a)**.

33. A steering column and seat belts according to at least one of claims 25 to 32, wherein on the longitudinal movement the expanding or contracting clamping element **(82a, 82b)** is guided loosely by the two-sided retaining strut **(81.2a)** or guide pin **(82.2b)** and frictionally by the portion **(81.3a, 81.3b)**.

34. A steering column and seat belts according to at least one of claims 25 to 33, characterized by arrangement of
- a blocking pin **(60.3)** to the clamping element **(82a)**; or
- two side notches to the retaining element **(81b)** and two guide sleeves **(60.5a)** with blocking pin **(60.3a)** to the clamping element **(82b)**

to limit the longitudinal movement.

35. A steering column and seat belts according to claim 34, characterized by arrangement of a cone-shaped chamfer "a", retaining notch and guide pin **(82.2b)** to the retaining element **(81b)**.

36. A steering column and seat belts according to at least one of claims 25 to 35, wherein the belt wire **(60.1)** of the seat belt **(64)** is connected to the clamping element **(82a, 82b)** by wire holder **(60.2, 60.2a)**, blocking pin **(60.3, 60.3a)**, two securing parts **(60.4, 60.4a)**, if necessary by two guide sleeves **(60.5a)**.

37. A steering column and seat belts according to at least one of claims 23 to 36, wherein the wire **(60)** is connected to the tube **(71.1)** or clamping element **(82, 82a to 82e)** by wire holder **(60.2c, 60.2d)**, blocking pin **(60.3c, 60.3d)**, two securing parts **(60.4, 60.4a)** and pre-wire **(60.1c, 60.1d, 60.1e)**.

38. A steering column and seat belts according to at least one of claims 23 to 37, characterized by arrangement of a clampable spacer **(60.6)** with open profile and length g_1, g_2, .. , g_m or g_n to pre-wire **(60.1e)** of the wire **(60)** between the blocking ring **(60.7)** and holder **(60.8)**.

39. A steering column and seat belts according to at least one of preceding claims, characterized by arrangement of a hole to the strut of the guide element **(52, 52a)** serving as pivot **(47, 47a)** of the wire **(60)**.

40. A steering column and seat belts according to at least one of preceding claims, wherein the limitation-units **(70, 80, 80a to 80e)** of the safety device are provided with a plurality of predetermined fracture "b" having injury-irrelevant threshold values to gradually lower large impact energy.

41. A steering column and seat belts according to at least one of preceding claims, wherein the safety device for survival chance in arbitrary rear collision has the same features as the safety device in arbitrary front collision.

42. A steering column and seat belts according to at least one of preceding claims,, characterized by use of metal, compound material, glass fibre reinforced material or non-metal material for material of impact element, additional element, guide element, bearing, delimiter, retaining part, clamping element, retaining element, tube and blocking parts.